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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BONZO, BRYCE P

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/812,657

Applicant(s)

HAMMOND ET AL.

Examiner

Bryce P. Bonzo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/20/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1-24 are rejected under 35 USC §103.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 4 is rejected under 35 U.S.C. 103(a) as being anticipated by Beheshti (United States Patent No. 5,955,946) in view of Willoughby (United States Patent No. 6,549,880 B1).

As per claim 1, Beheshti discloses:

A notification system for at least one power supply coupled to a computer network and adapted to transmit data over the computer network when the at least one power supply undergoes an entry of a critical state, the notification system comprising (column 10, lines 37-41 and column 9, lines 55-56):

a computer system connected to the computer network, the computer system being adapted to (column 1, lines 5-9):

monitor information transmitted over the computer network and detect an occurrence of the data being associated with the entry of the critical state (column 8, lines 49-59);

store information relating to the data being associated with the entry and exit of the critical state (column 10, lines 50-62).

Beheshti does not explicitly disclose:

report over the communication network at least one of (i) a combination of an entry time of the critical state and an exit time of a critical state, and (ii) a duration of the time as a difference between the entry time and the exit time of the critical state (Willoughby: column 16, lines 48-58). Willoughby provides a reliability analysis engine which works off of real world data to determine fault statistics, in much the same way as Beheshti. Willoughby however, is geared specifically for the arena of power faults. Willoughby allows for fine tuning of an electrical network including planning and prevention, and post fault analysis. Therefore it would have been obvious to one of ordinary skill in the art of fault tolerance to incorporate the enhanced monitoring system of Willoughby into the fault reporting system of Beheshti, creating a more comprehensive fault handling system.

As per claim 2, Beheshti does not explicitly disclose:

wherein the power supply includes a network card coupled to the computer network for communicating with the computer network.

The Examiner asserts that it is well known and practiced in the art to provide add-in network cards to power supplies to enable communication on a network without the power supply communicating through an intermediary computer. This is done to allow direct communication and monitoring of the power supply. This allows the network administrator direct access to the power supply via the network, and removes any point of failure that may have resulted from failed intermediary computer which would falsely indicate a failed power supply out of communication. Further, having the power supply directly integrated into the network power via its own network card allows supply to be monitored when supplying power to devices which themselves do not have network access. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to provide the well known network card for power supplies into the system of Beheshti which explicitly is for remote and distributed systems which may sustain power fluctuations, thereby allowing increased communication to the centralized server.

As per claim 3, Beheshti discloses:

a computer coupled to the at least one power supply and having a network card coupled to the computer network (column 8, lines 6-24).

As per claim 4, Beheshti discloses:

A notification system for at least one power supply coupled to a computer network and adapted to transmit data over the computer network when the at least one power supply undergoes an entry of a critical state, the notification system comprising :

- a computer system connected to the computer network, the computer system being adapted to (column 1, lines 5-9);

- monitor information transmitted over the computer network and detect an occurrence of the data being associated with the entry of the critical state (column 8, lines 49-59),

- store information relating to the data being associated with the entry of the critical state (column 10, lines 50-62);

- report over the computer network information relating to a duration of the critical (column 7, lines 43-52),

- wherein the computer is further adapted to, in response to detecting the occurrence of the data being associated with the entry of the critical state, continuously polls the power supply system at predetermined time intervals (column 8, lines 47-59).

Beheshti does not explicitly disclose:

- wherein the computer is further adapted to, in response to detecting the occurrence of the data being associated with the entry of the critical state, continuously polls the power supply system at predetermined time intervals until a poll indicates that the power supply system has left the critical state (Willoughby: column 16, lines 48-58).

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Willoughby provides a reliability analysis engine which works off of real world data to determine fault statistics, in much the same way as Beheshti. Willoughby however, is geared specifically for the arena of power faults. Willoughby allows for fine tuning of an electrical network including planning and prevention, and post fault analysis. Therefore it would have been obvious to one of ordinary skill in the art of fault tolerance to incorporate the enhanced monitoring system of Willoughby into the fault reporting system of Beheshti, creating a more comprehensive fault handling system.

As per claim 5, Beheshti discloses:

the at least one power supply coupled to the computer network (column 7, lines 43-52; column 9, lines 41-67).

As per claim 6, Beheshti does not disclose:

wherein the critical state is a loss of output power of a battery.

The Examiner asserts that the use of a battery as a power supply is notoriously well known. Batteries provide energy storage for times when external power is not available. Often systems will contain multiple layers of batteries to ensure against power failure. Remote stations often have many tiers of power back up as they, being remote these stations consume significant resources and time to repair. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to implement the power supply which is monitored in Beheshti as a battery, as this batteries are a

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prime choice for use remote and distributed environments. Beheshti his invention as being particularly well suited to such systems (column 11, lines 29-33).

As per claim 7, Beheshti does not explicitly disclose:

wherein the critical state is a loss of communication with a power supply.

The Examiner asserts monitoring for a loss of communication with a power supply in a system designed to monitor a power supply is notoriously well known in the art and to its practitioners. The knowledge of whether a device under monitoring is actually communicating with the monitor is fundamental to monitoring the device, particularly in a system where the device provides the monitor the status information such as Beheshti. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to include a function to determine whether or not a power supply has lost communication with a monitor into the monitoring system of Beheshti and therefore provide the most rudimentary monitoring function (Is what I am monitoring even there?) in addition to monitoring fine details such as power fluctuations.

As per claim 8, Beheshti discloses:

wherein the data being associated with the entry of the critical state is packetized data (column 8, lines 6-25: Ethernet and modems transmit packetized data, further more, SNMP is a member of the TCP/IP protocol suite which is packetized).

As per claim 9, Beheshti discloses:

wherein the data being associated with the entry of the critical state is a trap (column 8, lines 46-59 describe the SNMP trap; Figures 4 and 12).

As per claim 10, Beheshti discloses:

A notification system for a plurality of power supplies each coupled to a network and each adapted to transmit a trap over the computer network when the power supply undergoes an entry of a critical state, the notification system comprising:

a computer system connected to the computer network, the computer system being adapted to (column 1, lines 5-9):

monitor information transmitted over the computer network and detect a trap being associated with the entry the critical state, wherein upon detecting from a power supply the trap being associated with the entry of the critical state, the power supply is polled at predetermined time intervals until a poll indicates that the power supply has left the critical state (column 8, lines 47-59);

store information relating to the trap being associated with the entry of the critical state of each of power supply (column 10, lines 50-52).

Beheshti does not explicitly disclose the :

report over the computer network the information relating to the duration of each critical state of each power supply (Willoughby: column 16, lines 48-58). Willoughby provides a reliability analysis engine which works off of real world data to determine

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fault statistics, in much the same way as Beheshti. Willoughby however, is geared specifically for the arena of power faults. Willoughby allows for fine tuning of an electrical network including planning and prevention, and post fault analysis. Therefore it would have been obvious to one of ordinary skill in the art of fault tolerance to incorporate the enhanced monitoring system of Willoughby into the fault reporting system of Beheshti, creating a more comprehensive fault handling system.

As per claim 11, Beheshti does not explicitly disclose:

wherein the power supply includes a network card coupled to the computer network for communicating with the computer network.

The Examiner asserts that it is well known and practiced in the art to provide add-in network cards to power supplies to enable communication on a network without the power supply communicating through an intermediary computer. This is done to allow direct communication and monitoring of the power supply. This allows the network administrator direct access to the power supply via the network, and removes any point of failure that may have resulted from failed intermediary computer which would falsely indicate a failed power supply out of communication. Further, having the power supply directly integrated into the network power via its own network card allows supply to be monitored when supplying power to devices which themselves do not have network access. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to provide the well known network card for power supplies into the system of Beheshti which explicitly is for remote and distributed systems which may

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sustain power fluctuations, thereby allowing increased communication to the centralized server.

As per claim 12, Beheshti discloses:

further comprising the plurality of computers having a network card coupled to the computer network, wherein one computer is coupled to each of the power supplies (column 8, lines 6-24).

As per claim 13, Beheshti discloses:

further comprising the plurality of power supplies coupled to the network (column 8, lines 6-24).

As per claim 14, Beheshti does not disclose:

wherein the critical state is a loss of output power of a battery.

The Examiner asserts that the use of a battery as a power supply is notoriously well known. Batteries provide energy storage for times when external power is not available. Often systems will contain multiple layers of batteries to ensure against power failure. Remote stations often have many tiers of power back up as they, being remote these stations consume significant resources and time to repair. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to implement the power supply which is monitored in Beheshti as a battery, as this batteries are a prime choice

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for use remote and distributed environments. Beheshti his invention as being particularly well suited to such systems (column 11, lines 29-33).

As per claim 15, Beheshti does not explicitly disclose:

wherein the critical state is a loss of communication with a power supply.

The Examiner asserts monitoring for a loss of communication with a power supply in a system designed to monitor a power supply is notoriously well known in the art and to its practitioners. The knowledge of whether a device under monitoring is actually communicating with the monitor is fundamental to monitoring the device, particularly in a system where the device provides the monitor the status information such as Beheshti. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to include a function to determine whether or not a power supply has lost communication with a monitor into the monitoring system of Beheshti and therefore provide the most rudimentary monitoring function (Is what I am monitoring even there?) in addition to monitoring fine details such as power fluctuations.

Claims 16 and 17 are the means plus function embodiment of claims 10 and 11 and are rejected on the same grounds.

Claims 18-20 are the method embodiment of claim 10 and are rejected accordingly.

As per claim 21, Beheshti discloses:

monitoring the computer network for an indication that a power supply has entered a critical state (column 8, lines 49-59).

Beheshti does not explicitly disclose:

if the power supply has entered a critical state, monitoring over the computer network for a status of a battery of a power supply.

The Examiner asserts that it is well known and practiced in the art to provide add-in network cards to power supplies to enable communication on a network without the power supply communicating through an intermediary computer. This is done to allow direct communication and monitoring of the power supply. This allows the network administrator direct access to the power supply via the network, and removes any point of failure that may have resulted from failed intermediary computer which would falsely indicate a failed power supply out of communication. Further, having the power supply directly integrated into the network power via its own network card allows supply to be monitored when supplying power to devices which themselves do not have network access. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to provide the well known network card for power supplies into the system of Beheshti which explicitly is for remote and distributed systems which may sustain power fluctuations, thereby allowing increased communication to the centralized server.

Beheshti does not explicitly disclose:

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if monitoring has indicated that the battery is operative and was previously inoperative, recording a time period that the battery was inoperative; and

if monitoring has indicated that communication is reestablished but was previously lost with the power supply, recording a time period that communication was lost with the power supply. (Willoughby: column 16, lines 48-58). Willoughby provides a reliability analysis engine which works off of real world data to determine fault statistics, in much the same way as Beheshti. Willoughby however, is geared specifically for the arena of power faults. Willoughby allows for fine tuning of an electrical network including planning and prevention, and post fault analysis. Therefore it would have been obvious to one of ordinary skill in the art of fault tolerance to incorporate the enhanced monitoring system of Willoughby into the fault reporting system of Beheshti, creating a more comprehensive fault handling system.

As per claim 22, Beheshti discloses:

if monitoring has indicated that the battery is inoperative, polling the power supply at a predetermined interval (column 8, lines 47-59).

As per claim 23, Beheshti disclose:

if monitoring has indicated that communication is lost of the power supply, polling the power supply at a predetermined time interval (column 8, lines 47-59).

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Claim 24 is considered the is article of manufacture of claim 10, and is rejected on the same grounds.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P. Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Bryce P Bonzo
Primary Examiner
Art Unit 2114